

Application No. 09/889,000
Amendment "E" dated January 13, 2006
Reply to Office Action mailed September 14, 2005 and Advisory Action mailed December 7, 2005

REMARKS

These remarks and the accompanying amendments are responsive to the Office Action mailed September 15, 2005 (hereinafter, the "Office Action") and to the Advisory Action mailed December 7, 2005 (hereinafter, the "Advisory Action"). As mentioned in the Advisory Action, the claim amendments made in Amendment "C" were entered of record, and this response assumes the same. Claims 2-5, 7-26 and 28-48 were pending at the time of the last Examination and remain pending by this response. Claims 2, 3, 8, 9, 28, 29, 33 and 34 are currently amended. Entry of the claim amendments is respectfully requested in light of the accompanying Request for Continued Examination and the accompanying petition and fee for a one-month extension of time.

Section 2 of the Office Action objected to the drawings. The Advisory Action, however, indicates that with the drawing amendments made November 14, 2005, the drawings are now in acceptable.

Section 3 of the Office Action objects to several informalities in the Claims 16 and 17, which the Applicants submit have been corrected by the claim amendments made in Amendment "C" dated November 14, 2005.

Section 5 of the Office Action rejected Claims 2-5, 8-15, 18-26, 28-31, 33-40 and 43-48 under 35 U.S.C. 102(a) as being anticipated by Johnson, Christopher Phillip (EP 0975184 A1) (the European reference hereinafter referred to as "Johnson").

1) Re: Claims 2-3 and 28-29

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As recited in Claims 2-3 and 28-29, "when a request for channel assignment is issued, whether a condition that it is possible to assign both a channel for a service area based on a FDD method and a channel for a service area based on a TDD method to the request, and the number of handovers that the mobile station related to said request has performed in the past is [high in the case of Claims 2 and 28, and low in the case of Claims 3 and 29], is satisfied" is judged, and if the condition is satisfied, "the channel for the service area based on the [FDD in the case of Claims 2 and 28, and TDD in the case of Claims 3 and 29] method" is assigned to said request.

The Advisory Action asserts that Johnson reads on a feature of claims 2-3 and 28-29 regarding handover by referring to column 8, lines 14-25, column 9, lines 15-23, and column 10, lines 22-33 of Johnson.

In Johnson, the only description regarding handover is "If the cellular telephone 108 is traveling at high velocity, for example, 100 kph, a large cell, such as a macro cell is allocated, since the number of handovers is reduced." (column 8, lines 22-25). However, this description only describes avoiding future handovers. Johnson does not disclose assigning a channel based on FDD method or TDD method in consideration of the number of handovers that the mobile station has performed in the past. Therefore, Claims 2, 3, 28 and 29 are not anticipated by Johnson at least for this reason.

Further, Claims 2-3 and 28-29 assign a channel for a service area based on a FDD method, if the number of handovers that the mobile station has performed in the past is high, while it assigns a channel for a service area based on a TDD method, if the number of handovers that the mobile station has performed in the past is low.

In contrast, Johnson only discloses that if the cellular telephone is traveling at high velocity, a large cell such as a macro cell is allocated. Johnson does not disclose which one of

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channels based on FDD method and TDD method is assigned, if the cellular telephone is traveling at high velocity. In Johnson, the only description regarding which one of channels based on FDD method and TDD method is assigned is that the TDD scheme is assigned if data traffic is unsymmetric (see column 8, lines 20-22). Therefore, also from this point of view, the Claims 2, 3, 28 and 29 are not anticipated nor rendered obvious over Johnson.

2) Re: claims 4-5 and 30-31

Claims 4-5 and 30-31 assigns a channel for a service area based on a FDD method, if the maximum reception power value of a forward common channel of the mobile station is low, while it assigns a channel for a service area based on a TDD method, if the maximum reception power value of a forward common channel of the mobile station is high.

The Advisory Action asserts that Johnson reads on Claims 4-5 and 30-31 regarding the maximum reception power value by referring to column 9, lines 15-23, and column 10, lines 22-33 of Johnson. This is based on the assumption that Johnson considers the position ("K2" of Figure 8) of the cellular telephone when assigning a channel based on FDD method or TDD method, and it is inherent that the farther the position of the cellular telephone becomes, the lesser the received power becomes and vice versa, and therefore, Johnson uses high/low of the received power value for selecting FDD/TDD method.

However, Johnson does not disclose which one of channels based on FDD method and TDD method is assigned, if the position of the cellular telephone is near. Johnson also does not disclose which one of channels based on FDD method and TDD method is assigned, if the position of the cellular telephone is far.

That is, at column 10, lines 22-33 of Johnson, in connection with "K2" of Figure 8, there is some description regarding the values G21, G22 and G23. However, there is no description

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regarding which value is higher than the other values nor which value is lower than the other values.

Therefore, Claims 4-5 and 30-31 are not anticipated nor rendered unpatentable over Johnson, which does not disclose the above-mentioned features of Claims 4-5 and 30-31, i.e. the feature that a channel for a service area based on a FDD method is assigned, if the maximum reception power value of a forward common channel of the mobile station is low, while a channel for a service area based on a TDD method is assigned, if the maximum reception power value of a forward common channel of the mobile station is high.

3) Re: Claims 8-15, 18-25, 33-40 and 43-46

The present invention of claims 8-15, 18-25, 33-40 and 43-46 detects a particular mobile station and switches the assigned channel of the detected mobile station. The Advisory Action asserts that although Johnson does not explicitly use the word "switching the assigned channel of the mobile station", the 'assigned FDD/TDD scheme to the cellular telephone' is performed the same function as "switching the assigned channel of the mobile station", since the assigned scheme is based on the request for service of the cellular telephone for changing the selected scheme during activity as disclosed in column 10, line 56 to column 11, line 10.

According to column 11, lines 2-10 of Johnson, during a period when the cellular telephone 108 is active, i.e. when service is being provided, if factors relating the optimum choice of duplexing scheme change due to activity of the subscriber, the cellular telephone 108 can change duplexing scheme.

This means that the cellular telephone 108 sends a request for service to the base station 104 (similar to the time when the cellular telephone 108 initially requests a service), and the base station 104 allocates a different scheme to the cellular telephone 108.

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Thus, in this case, the base station 104 only allocates a scheme to the cellular telephone 108 in response to the service request from the cellular telephone 108. The base station 104 does not detect a particular mobile station (cellular telephone).

For example, in contrast to the recitations of claim 8, the base station 104 of Johnson does not detect a mobile station to which a channel for a service area based on a TDD method is currently assigned and a channel for a service area based on a FDD method can be assigned and whose number of handovers performed in the past is high.

Therefore, the Claims 8-15, 18-25, 33-40 and 43-46 are not anticipated nor rendered unpatentable over Johnson.

4) Re: claims 26 and 47-48

As discussed above, since Claims 2-5, 8-15, 18, 20, 24 and 25 has novelty and non-obviousness over Johnson, Claim 26 depending on Claims 2-5, 8-15, 18, 20, 24 and 25 also has novelty and non-obviousness over Johnson. Further, since Claims 28-31, 33-40 and 43-46 have novelty and non-obviousness over Johnson, Claims 47-48 depending on Claims 28-31, 33-40 and 43-46 also has novelty and non-obviousness over Johnson.

Therefore, favorable action is respectfully requested. In the event that the Examiner finds remaining impediment to a prompt allowance of this application that may be clarified through a telephone interview, the Examiner is requested to contact the undersigned attorney.

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Respectfully submitted,



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